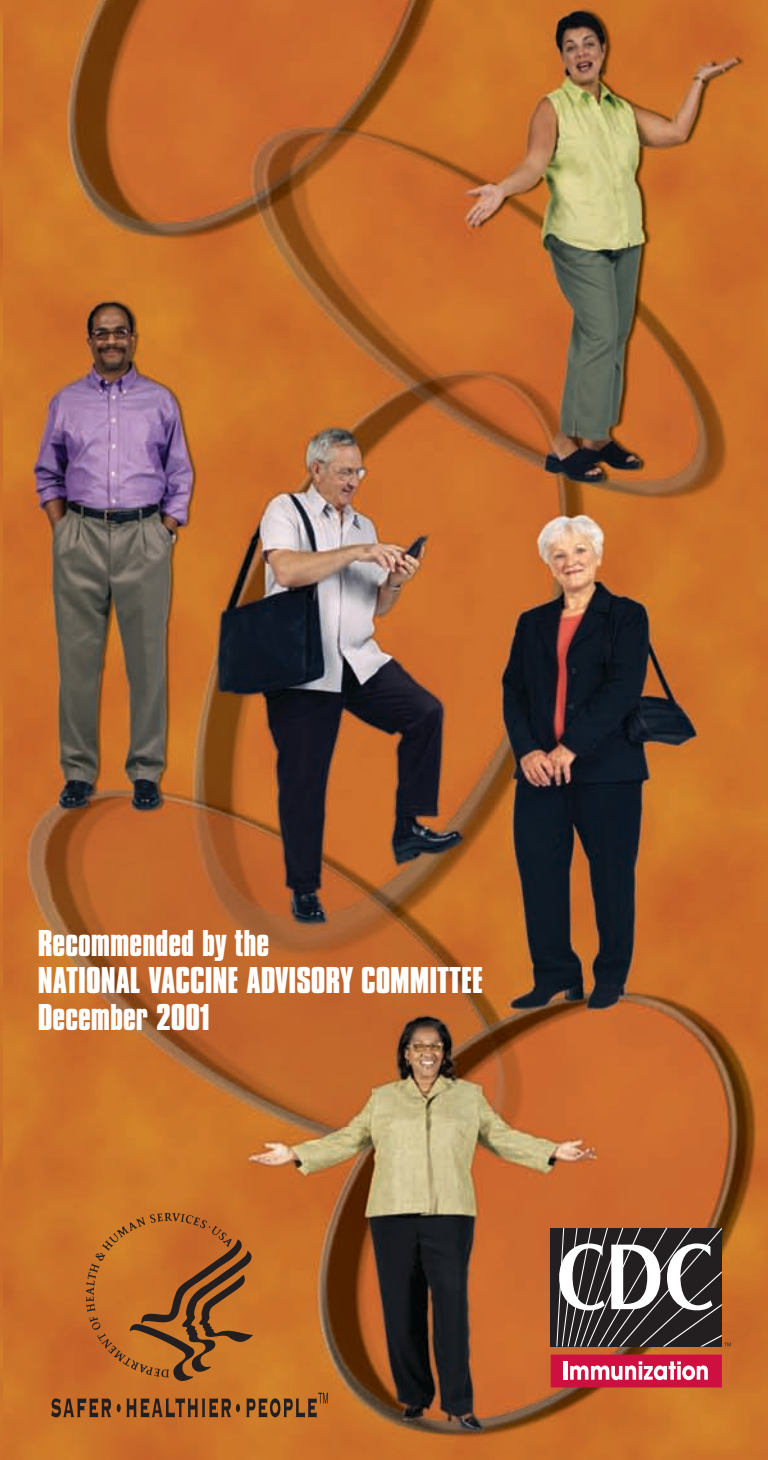
Standards for Adult Immunization Practices



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Immunization

Standards for Adult Immunization Practices

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Standards for Adult Immunization Practices

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Standards for Adult Immunization Practices

Introduction

As a result of successful immunization practices geared toward infants and children in the United States, the incidence of childhood vaccine-preventable diseases has declined dramatically. However, similar success among adults has not been achieved.

All adults should be immune to measles, mumps, rubella, tetanus, diphtheria, and varicella. All those aged 50 or older, and younger persons at high risk should receive influenza vaccine annually; all those aged 65 or older, and younger persons at high risk, should receive pneumococcal vaccine. Adults susceptible to hepatitis A, hepatitis B, and polio should be vaccinated if they are at risk for exposure to an infection. Ideally, recommended vaccines should be given to all adults as a routine part of health care.

Adults suffer the vast majority of vaccine-preventable disease in the U.S. During average influenza seasons, up to 40 million Americans may suffer from influenza infection, approximately 100,000 are hospitalized, and approximately 40,000 die of influenza and its complications.[1,2] Pneumococcal infections account for 100,000 to 135,000 hospitalizations for pneumonia, more than 60,000 cases of bacteremia

and other forms of invasive disease, and about 7,000 deaths from invasive pneumococcal disease each year.[3,4,5] More than 75,000 persons, mostly adolescents and adults, contract hepatitis B each year.[6,7] There are approximately 4,000 to 5,000 deaths due to hepatitis B each year, mainly among adults.[8] Approximately 8 million young women are unprotected against rubella, putting their infants at risk for congenital rubella syndrome if these women should become pregnant.[9] Up to half of all Americans age 50 and older have not received all of their recommended immunizations against tetanus and diphtheria.[10]

Today, vaccines are safe, effective, and readily available. Benefits of vaccination include reduced disease incidence, morbidity and mortality, and reduced health care costs. However, vaccines remain underutilized among adults, especially among persons at high risk for infection and complications of disease, and among certain racial/ethnic populations. For instance, the rates of influenza and pneumococcal vaccination in African American and Hispanic populations are significantly lower than those among whites.[11]

The U.S. Department of Health and Human Services' *Healthy People 2010* outlines a comprehensive, nationwide health promotion and disease prevention agenda.[12] There are 8 objectives that relate to adult immunizations or vaccine-preventable diseases. Achieving these objectives will require a dramatic increase from current coverage levels.

For example, for influenza and pneumococcal vaccination of adults age 65 and older, the target coverage is 90% for annual influenza immunization and 90% for one dose of pneumococcal vaccine. In 2002, national statistics demonstrated rates of only 66% and 56%, respectively.[13] Among adults aged 65 years or less at high risk due to medical, behavioral, or environmental risk factors, even greater increases will be required to reach the 2010 targets.

In 1990, the National Coalition for Adult Immunization (NCAI) developed the first Standards for Adult Immunization Practices, which were endorsed by more than 60 professional organizations from the public and private sectors.[14] In January 1994, the National Vaccine Advisory Committee (NVAC) reviewed the status of adult immunization in the United States and presented specific goals and recommendations for improvement.[15] In 2000, NVAC issued a report on adult immunization programs in nontraditional settings. This report included quality standards for these programs as well as guidance for program evaluation.[16]

To reflect the recommendations and standards in these recent reports and the *Healthy People 2010* coverage goals, the NVAC and NCAI have revised the 1990 Standards. The revised Standards are more comprehensive than the previous version and evidence-based medicine has been used to support these Standards wherever possible.[17] The Standards supplement research with expert

consensus in areas where research does not offer guidance but experience does.

Today, more tools are available to support immunization providers. The revised Standards include links to web sites that contain information on model standing order policies, instructions for setting up reminder/recall systems, and templates for personal vaccination records.

The revised Standards for Adult Immunization Practices provide a concise, convenient summary of the most desirable immunization practices. The Standards have been widely endorsed by major professional organizations. This revised version of the Standards for Adult Immunization Practices is recommended for use by all health care professionals and payers in the public and private sectors who provide immunizations for adults. Everyone involved in adult immunization should strive to follow these Standards. Not all practices and programs have the resources necessary to fully implement the Standards, nevertheless, those lacking the resources should find the Standards useful to guide current practice and to guide the process of defining immunization needs and obtaining additional resources in the future.

Standards for Adult Immunization Practices

Make vaccinations available

1. Adult vaccination services are readily available.
2. Barriers to receiving vaccines are identified and minimized.
3. Patient "out of pocket" vaccination costs are minimized.

Assess patients' vaccination status

4. Health care professionals routinely review the vaccination status of patients.
5. Health care professionals assess for valid contraindications.

Communicate effectively with patients

6. Patients are educated about risks and benefits of vaccination in easy-to-understand language.

Administer and document vaccinations properly

7. Written vaccination protocols are available at all locations where vaccines are administered.
8. Persons who administer vaccines are properly trained.
9. Health care professionals recommend simultaneous administration of all indicated vaccine doses.
10. Vaccination records for patients are accurate and easily accessible.

11. All personnel who have contact with patients are appropriately vaccinated.

Implement strategies to improve vaccination rates

12. Systems are developed and used to remind patients and health care professionals when vaccinations are due and to recall patients who are overdue.

13. Standing orders for vaccinations are employed.

14. Regular assessments of vaccination coverage levels are conducted in a provider's practice.

Partner with the community

15. Patient-oriented and community-based approaches are used to reach target populations.

The Standards

Make Vaccinations Available

Standard 1: *Adult vaccination services are readily available.*

Primary care health care professionals who serve adults should always include routinely recommended vaccinations as part of their care. Specialists, whose patients may be at increased risk of vaccine-preventable diseases, also should include routinely recommended vaccinations as part of their care. For selected vaccines (e.g., meningococcal vaccine for college entrants, vaccines for international travelers) patients may be referred to another provider.

Standard 2: *Barriers to receiving vaccines are identified and minimized.*

Barriers to receiving vaccines may include requiring a physical examination before vaccination, requiring an additional visit for vaccination, long waiting periods, and lack of educational materials that are culturally appropriate. Prior to vaccine administration, simply observing the patient, asking if the patient is well and questioning the patient/guardian about vaccine contraindications is sufficient.

Standard 3: *Patient "out of pocket" vaccination costs are minimized.*

Resources should be identified to keep patient vaccination costs as low as possible, specifically for those patients aged 65 years or older and for vaccines not covered by Medicare Part B.

In the public sector, patient fees should include only the cost of vaccine and administration that cannot be funded through another source. In the private sector, routinely recommended vaccination services should be included in basic benefits packages. System and policy changes should be addressed to provide adequate reimbursement to providers for delivering vaccinations to their adult population.

Assess Patients' Vaccination Status

Standard 4: *Health care professionals routinely review the vaccination status of patients.*

Health care professionals should review and document the vaccination status of all new patients during initial office visits and also review vaccination status on an annual basis thereafter. Health care professionals should ascertain if the patient has medical risk factors, lifestyle risk factors, or an occupation for which certain vaccines may be indicated. Health care professionals should record this information in the patient's chart and preventive health summary. Health care professionals should routinely review pneumococcal vaccination status at the time of influenza vaccination.

Standard 5: *Health care professionals assess for valid contraindications.*

Failure to differentiate between valid and invalid contraindications often results in the needless deferral of indicated vaccinations. Health care professionals

should ask about prior adverse events in connection with a vaccination and about any conditions or circumstances that might indicate vaccination should be withheld or delayed. Health care professionals should refer to current Advisory Committee on Immunization Practices (ACIP) recommendations on valid and invalid contraindications as well as on valid indications for vaccine use. ACIP recommendations can be accessed on the Internet at **www.cdc.gov/nip**.

Communicate Effectively with Patients

Standard 6: *Patients are educated about risks and benefits of vaccination in easy-to-understand language.*

Health care professionals should discuss with the patient the benefits of vaccines, the diseases that they prevent, and any known risks from vaccines. These issues should be discussed in the patient's native language, whenever possible. Printed materials, accurately translated into the patient's language should be provided. For most commonly used vaccines, the U.S. Federal Government has developed Vaccine Information Statements for use by both public and private health care professionals to give to potential vaccine recipients. For vaccines covered by the National Childhood Vaccine Injury Act, including those vaccines used in children, these forms are required. These statements are available in English and other languages. Health care professionals should allot ample time with patients to review

written materials and address questions and concerns. Information and assistance can be obtained by calling the CDC National Immunization Information Hotline at **1-800-232-2522** (English) and **1-800-232-0233** (Spanish) or accessing the CDC National Immunization Program website at **www.cdc.gov/nip**.

Health care professionals should respect each patient's right to make an informed decision to accept or reject a vaccine or defer vaccination until more information is collected.

Administer and Document Vaccinations Properly

Standard 7: *Written vaccination protocols are available at all locations where vaccines are administered.*

The medical protocol should detail procedures for vaccine storage and handling, vaccine schedules, contraindications, administration techniques, management and reporting of adverse events, and record maintenance and accessibility. These protocols should be consistent with established guidelines. CDC-recommended storage and handling procedures are available from CDC by calling 404-639-8222 and on the Internet at: **www.cdc.gov/nip/publications/vac_mgt_book.pdf**

Health care professionals should promptly report all clinically significant adverse events following vaccination to the Vaccine Adverse Event Reporting System (VAERS), even if the health care professional does not believe that the vaccine caused the event.

Reporting is required for those vaccines given to adults and medical conditions covered by the National Childhood Vaccine Injury Act of 1986, as amended. Health care professionals should be aware that patients may report to VAERS, and that if they choose to do so, they are encouraged to seek the help of their health care professional. Report forms and assistance are available by calling **1-800-822-7967** or on the Internet at **www.fda.gov/cber/vaers/vaers.htm**

The National Vaccine Injury Compensation Program (VICP) is a no-fault system that compensates persons of any age for injuries or conditions that may have been caused by a vaccine recommended by CDC for routine administration to children. Health care professionals should be aware of the VICP in order to address questions raised by patients. Information about the VICP is available on the Internet at **www.hrsa.gov/osp/vicp** or by calling **1-800-338-2382**.

Since VAERS and VICP are separate programs, a report of an event to VAERS does not result in the submission of a compensation claim to VICP. Such a claim must be filed independently in the U.S. Court of Federal Claims. A brief description and contact information for both programs is provided on each Vaccine Information Statement for vaccines covered by the VICP.

Standard 8: *Persons who administer vaccines are properly trained.*

All persons who administer vaccinations should be fully trained in vaccine storage and handling, vaccine schedules, contraindications, administration techniques, management and reporting of adverse events, and record maintenance and accessibility. Office staff should receive continuing education on these issues annually. With appropriate training, persons other than physicians and nurses can administer vaccines. Health care professionals should contact public health authorities or other medical authorities in their state for more information concerning which individuals are permitted to administer vaccines.

Standard 9: *Health care professionals recommend simultaneous administration of all indicated vaccine doses.*

Administering indicated vaccines simultaneously is safe and effective. Simultaneous administration decreases the number of required visits and the potential for missed doses. Measles, mumps, and rubella (MMR) vaccine and tetanus and diphtheria (Td) toxoids should always be administered in their combined product. Giving influenza and pneumococcal vaccine at the same time (but in separate arms) is also safe and effective. Health care professionals should respect the choices of patients and their caregivers.

Standard 10: *Vaccination records for patients are accurate and easily accessible.*

Patient vaccination histories should be recorded on a standard form in an easily accessible location in the medical record to facilitate rapid review of vaccination status. Accurate record keeping helps ensure that needed vaccinations are administered and unnecessary vaccinations are not administered. Records should indicate the vaccine, the date of administration, the vaccine manufacturer and lot number, the signature and title of the person administering the vaccine, and the address where the vaccine was administered. The medical record at the primary care provider's office, clinic or worksite should include all vaccinations received (such as those received at a specialist's office, influenza vaccination clinic, or pharmacy).

Record keeping may be paper-based or computerized. Computer systems make record maintenance, retrieval, and review easier.

Health care professionals should give patients a personal record of vaccinations they have received, including the dates and places of administration. Patients should be encouraged to bring their vaccination records to all medical visits.

Information and a modifiable template of these forms and records are available at www.ahcpr.gov/ppip/manual/flowadul.pdf and are also available on CD-ROM and can be ordered on the Internet at **ww.atpm.org/Immunization/whatworks.html**

Standard 11: *All personnel who have contact with patients are appropriately vaccinated.*

Health care professionals and other personnel (including first responders) who have contact with patients should be appropriately vaccinated (e.g., annual influenza vaccination, hepatitis B vaccination). Institutions should have policies to review and maintain the appropriate vaccination of staff and trainees.

ACIP recommendations for vaccinating health care workers are available on the Internet at **www.cdc.gov/nip/publications/ACIP-list.htm**

Implement Strategies to Improve Vaccination Rates

Standard 12: *Systems are developed and used to remind patients and health care professionals when vaccinations are due and to recall patients who are overdue.*

Evidence shows that reminder/recall systems improve adult vaccination rates. Systems may be designed to alert patients who are due (reminder) or overdue (recall) for specific vaccine doses or they may alert patients to contact their provider to determine if

vaccinations are needed. Reminders or recalls can be mailed or communicated by telephone; an autodialer can be used to expedite telephone reminders. Patients who might be at high risk for not complying with medical recommendations may require more intensive follow-up.

Provider reminder/recall interventions inform those who administer vaccinations that individual patients are due or overdue for specific vaccinations. Reminders can be delivered in patient charts, by computer, and/or by mail or other means, and content of the reminders can be specific or general.

Information about these strategies and resources to assist in their implementation are available on CD-ROM and can be ordered on the Internet at **www.atpm.org/Immunization/whatworks.html**. Model reminder recall templates are also available at **www.ahcpr.gov/ppip/postcard.pdf**

Standard 13: *Standing orders for vaccinations are employed.*

Evidence shows that standing orders improve vaccination coverage among adults in a variety of health care settings, including nursing homes, hospitals, clinics, doctor's offices, and other institutional settings. Standing orders enable non-physician personnel such as nurses and pharmacists to prescribe or deliver vaccinations by approved protocol without direct physician involvement at the time of the

interaction. Standing orders overcome administrative barriers such as lack of physician personnel to order vaccines. Further, the Centers for Medicare and Medicaid Services allow standing order exemption from Medicare rules (**www.cms.hhs.gov/medicaid/survey-cert/sc0302.pdf)**

Information about this strategy and its implementation is available on CD-ROM and can be ordered on the Internet at **www.atpm.org/Immunization/whatworks.html**

Standard 14: *Regular assessments of vaccination coverage rates are conducted in a provider's practice.*

Evidence shows that assessment of vaccination coverage and provision of the results to the staff in a practice improves vaccination coverage among adults. Optimally, such assessments are performed annually. Provider assessment can be performed by the staff in the practice or by other organizations including state and local health departments. Effective interventions that include assessment and provision of results also may incorporate incentives or comparing performance to a goal or standard. This process is commonly referred to as AFIX (Assessment, Feedback, Incentives, and Exchange of Information). Coverage should be assessed regularly so that reasons for low coverage in the practice, or in a sub-group of the patients served,

can be identified and interventions implemented to address them.

Information about this strategy and its implementation is available on CD-ROM and can be ordered on the Internet at **www.atpm.org/Immunization/whatworks.html**
Software to assist in conducting coverage rate assessments and feedback is available on the Internet at **www.cdc.gov/nip**

Partner with the Community

Standard 15: *Patient-oriented and community-based approaches are used to reach target populations.*

Vaccination services should be designed to meet the needs of the population served. For example, interventions that include community education, along with other components, such as extended hours, have been demonstrated to improve vaccination coverage among adults. Vaccination providers can work with partners in the community, including other health professionals (e.g., pharmacists), vaccination advocacy groups, managed care organizations, service organizations, manufacturers, and state and local health departments to determine community needs and develop vaccination services to address them.

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Endorsements

These Standards are approved by the National Vaccine Advisory Committee (NVAC), the National Coalition for Adult Immunization (NCAI), the Advisory Committee on Immunization Practices (ACIP), and the U.S. Public Health Service and endorsed by:

Adult Immunization Coalition for State of Illinois

American Academy of Family Physicians

American Academy of Otolaryngology-Head and Neck Surgery

American Academy of Pediatrics

American Academy of Physician Assistants

American College of Preventive Medicine

American College of Obstetricians and Gynecologists

American Health Care Association

American Medical Association

American Pharmaceutical Association

American Society of Health-System Pharmacists

Arizona Partnership for Adult Immunization

Association of Immunization Program Managers

Association of Professionals in Infection Control and Epidemiology, Inc

Association of State and Territorial Health Officials

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Health Resources and Services Administration

Hepatitis B Foundation

Immunization Action Coalition

Infectious Diseases Society of America

Institute for Advanced Studies in Aging and Geriatric Medicine

Maine Ambulatory Care Association

Memphis County Health Department

National Alliance for Hispanic Health

National Association of County and City Health Officials

National Association of School Nurses

National Foundation for Infectious Diseases

National Medical Association

National Partnership for Immunization

Partnership for Prevention

ENDORSEMENTS

Society for Adolescent Medicine

Society of Teachers of Family Medicine

State of Washington Department of Health

State of Maine Department of Health

The National Vaccine Advisory Committee (NVAC)

Committee History:

The National Vaccine Advisory Committee (NVAC) was chartered in 1988 to advise and make recommendations to the director of the National Vaccine Program and the assistant secretary for health, Department of Health and Human Services, on matters related to the prevention of infectious diseases through immunization and the prevention of adverse reactions to vaccines.

The NVAC is composed of 15 members from public and private organizations representing vaccine manufacturers, physicians, parents, and state and local health agencies. In addition, representatives from governmental agencies involved in health care or allied services serve as ex officio members of the NVAC.

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